

D6.7 RUN-EU SAPS OPPORTUNITIES REPORT

IPCA I Polytechnic of Cávado and Ave (WP6L)

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Abbreviations

AI	Artificial Intelligence
AIT	Athlone Institute of Technology
ECTS	European Credit Transfer and Accumulation System
EI	Emotional Intelligence
EIH	European Innovation Hubs
EQF	European Qualification Framework
ESG	European Standard Guidelines for Quality Assurance
EU	European Union
EZ-ID	European Zone for Interregional Development
FASA	Future and Advanced Skills Academy
FHV	Vorarlberg University of Applied Sciences
GEM	Group Exploratory Mission
НАМК	Häme University of Applied Sciences
HE	Higher Education
HEI	Higher Education Institution
IPCA	Polytechnic of Cávado and Ave
IPL	Polytechnic of Leiria
ISCED	International Standard Classification of Education
LIT	Limerick Institute of Technology
LO	Learning Outcomes
NHL-Stenden	NHL Stenden University of Applied Sciences
QA	Quality Assurance
SAB	Students Advisory Board
SAP	Short Advanced Programme
SAPc	SAP Joint Coordinating Team
SDG	Sustainable Development Goals
SZE	Széchenyi István University
TUS	Technological University of the Shannon
WP	Work Package
WPcL	Work Package Co-leader
WPL	Work Package Leader



1. Characterization of WP6 Short Advanced Programmes (SAPs)

1.1. State of the art of SAPs

"Our Learners will inherit the Future"

Considering our motto, RUN-EU is implementing a role of Short Advanced Programmes aligned with the future and advanced skills necessary for RUN-EU students and stakeholders to successfully meet the challenges of the future, engage in societal transformation and promote active citizenship, thereby leading in the creation of a new type of multinational interregional alliance, a **European Zone for Interregional Development (EZ-ID)**.

Considering previous documents and reports, this 2nd Opportunities report will present a state of the art on complete and ongoing SAPs.

Within the ambitious plan of RUN-EU Alliance, WP6 Short Advanced Programmes is responsible for designing and delivering Short Advanced Programmes (SAPs), based in transnational *curricula* and focusing on the future and advanced skills needs, enabling the promotion of flexible international mobility of students, innovative pedagogies and blended learning activities.

In the month 18 of the project, the WP6 accomplished the following tasks:

- Creation and delivery of 14 SAPs out of 80 SAPs (48 newly designed) settled numbers for the entire project. -
- By now, approximately 300 students (approximately 25 students per SAPs) and 90 staff (approximately 8 teaching and non-teaching staff per SAP) have been involved in the SAPs.
- Elaboration of two annual RUN-EU SAPs Opportunities Reports: D.6.6. 1st Opportunities Report on RUN-EU SAPs and current document, D6.7. 2nd Opportunities Report on RUN-EU SAPs.
- Development of a RUN-EU Digital Platform to support the SAPs' management, implementation and dissemination, a portal where all the SAPs can be found, please follow this link <u>here</u>.
- Development of the D6.3. Standard Guidelines for RUN-EU SAPs, including the List of Critical Information Elements, Programme at a glance and Detailed Programme.
- Development of "Step by Step" infographic on how to prepare and deliver SAPs.



Within the development of the first pilot SAPs, a set of lessons were learned that served as a basis for the preparation of the following SAPs. In this sense, D6.3. Standard Guidelines for RUN-EU SAPs present a set of standards and guidelines that need to be considered when designing, preparing, implementing, and managing SAPs and "Step by Step: How to build a SAP" infographic presents a resume of all the information presented in the D6.3.

These instruments are fine-tuned along with the joint development, preparation, delivery and assessment of the SAPs. At the same time, new materials, tools are created and the old ones are adjusted. Considering all the supported tools developed, especially the D6.3, D6.6, together with "Step by step: How to build a SAP" support the development of sustainable strategies, which reinforce the credibility of and accountability for RUN-EU activities and actions.

During the project implementation, the consortium aims to deliver a total of 80 SAPs, distributed as follows:

Year 1: creation and delivery of 8 new pilot SAPs. This aim has been reached.

Year 2: creation and delivery of 16 new SAPs; delivery of 8 previous SAPs created in the first year (24 in total). In month 18 of the project, we count with already delivered 4 new SAPs, in process of being offered and already ongoing, 3 new SAPs and 1 SAP at its second edition, to be developed still this year, 8 new SAPs and 2 SAPs at their second edition. To conclude, it is tangible to deliver in year 2, 18 SAPs in total (15 new SAPs and 3 SAPs in their second edition). Efforts will be made to develop 1 additional new SAP and 5 more SAPs in their second edition, but always taking into consideration keeping the quality, relevance and impact and following closely the development and implementation of the SAPs.

Year 3: creation and delivery of 24 new SAPs; delivery of 24 SAPs created in previous years (48 in total). For the last year of the project, the aim is tangible to deliver 42 new SAPs and 2 previous SAPs. The effort will be made to create a favorable ground to deliver the already created SAPs. At the end of year 2 and beginning of the year 3 the 3rd Survey on the potential SAPs will be launched, and will permit adjustment of the aims to deliver the initially proposed number of SAPs and the goals of the RUN-EU alliance.

At this moment of the project, we can resume what is tangible to deliver 65 new SAPs and 5 previous SAPs, considering the number of the proposal submitted in the 2nd Survey. We believe that after launching the 3rd Survey we can implement the 21 previous SAPs which will be at their 2nd edition.



In what concerns the established goals of the RUN-EU alliance, we are on our way to achieving them, such as:

- Supporting and settling the basis on "how to create and deliver SAPs" in the initial years of the experience and disseminating the model within the RUN-EU alliance;
- Creating and supporting a massive multi-format exchange programme of students and staff (more than 1000 students and 150 teachers), which will ensure high-level cooperation and common knowledge of the academic communities among all RUN-EU regions and universities.

The developed and work in progress SAPs have a virtual learning period and one or two weeks on-campus teaching periods. Transnational physical short-term mobility (from 1 to 2 weeks) is a compulsory component. Full online delivery has been considered in some of the SAPs because of exceptional circumstances (COVID-19). The classes of the SAPs normally consist of 10 students of the hosting member/country, and at least 14 international students, which are benefiting from a mobility scholarship. Each SAP is organized by at least one professor from the hosting institution and professors from other RUN-EU institutions. The involved academic staff will join the on-campus teaching period. For this, the international staff may benefit from a RUN-EU scholarship or may apply for an Erasmus+ staff mobility scholarship depending on the availability.

1.1.1. Step by Step: How to build a SAP

As previously mentioned, the guidelines of the D6.3. and directions of the D6.6. produced by this WP, were necessary to create an infographic "Step by step: How to build a SAP" (Figure 1) with material that would allow direct communication with the lecturers who prepare and develop the SAPs. The establishment of the D6.3. was structural for this WP, it defined the general and specific guidelines for the work to be developed. The members of this WP know and apply these guidelines, however, it is necessary to define effective, fast and universal communication strategies within RUN-EU to better communicate with teachers and members outside the WP.

The "Step by Step: How to build a SAP" infographic is a work in progress tool and continuously being improved within the gained experience in each SAP. At first, we created the infographic to show the steps (as a checklist) for the preparation of a SAP. Then we realized that a timeframe was needed in order everyone be aware of the expected time to be allowed for each step. In the future it is expected that more similar graphic tools will be developed.





Figure 1. Step by Step: How to build a SAP

1.1.2. SAPs Overall Quality Assessment

As described in the D6.3., each SAP needs to be holistically assessed in terms of quality, relevance and impact of the programme.



All RUN-EU partners have institutionally adopted the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG) which validates their preparedness to deal with the SAPs overall quality assessment and provides a firm basis for SAPs successful implementation.

In order to develop the SAPs learning environments and support services, it has been agreed, in the first phase, that the methodology of assessment of SAPs would be more focused on innovative qualitative approaches and on assessing the learning experience perceptions rather than on satisfaction level percentages. "Fitness for purpose", length, duration, degree of complexity and context were carefully taken under consideration by the WP6, WP3 and WP1 in the decision-making process to avoid "survey fatigue".

As stated in D6.3., the methodology for assessment is constantly monitored and reviewed, based on its application, results and future developments in this area. Following is a description and overall results of this process so far.

This process has been implemented in two phases:

1. pilot testing in two SAPs (Circular Design with Plastics; Game Changing Games) of the dimensions and tools described in D6.3, notably: i) group learning reflection facilitated by a representative of the institutional FASA using a Miro board (Annex 5.3.1); ii) Individual Learning Reflection Report (ILRR) sent to the participants by email at the end of the SAP (Annex 5.3.2.).

2. refinement (see report in Annex 5.3) and integration of assessment tools; pilot in 6 SAPs: Future Explorations; Go for a Digital Product; Preventing the Social Exclusion of Young People; Smart Everything; How to Navigate Through Unfamiliar Contexts; Challenging Game Development; Design of Cold Formed Steel Structures.

At this second stage, the ILRR merged with the Mobility Report proposed by the WP4, in order to improve response rates. The LearnWell questionnaire has been included as optional.

In short, for these six SAPs, the following tools were applied:

- Group Learning Reflection (details described in D.6.3.);

- Individual Learning Reflection Report (ILRR) + Mobility report | (Annex 5.3.2.);

- LearnWell (optional);

In the case of the SAPs Go for a Digital Product and Smart Everything, for which the contact week occurred at IPCA, the assessment exercises were facilitated by IPCA's



institutional FASA. For both, the last hour of the contact week was dedicated to assessment, with the following steps: 1) students were provided with the link to a Miro board for group reflection; 2) lecturers prompted students to engage in a conversation about the course; 3) students submitted the ILRR and Mobility assessments; 4) lecturers were asked to perform a SWOT analysis of the course. This last exercise was planned to occur after the assessment with students but it had to be adjusted since it would interrupt the ongoing conversation between students and lecturers, as well as the farewells. An email was sent afterwards, asking lecturers to perform the SWOT analysis individually.

In both cases, the exercises were very successful, in particular as they allowed students and lecturers to engage in fruitful conversations about the SAPs. When the Miro board was presented, students immediately started posting. Lecturers were then instructed to use these ideas as prompts for discussion. Some students engaged in the discussion out loud, others continued posting to the board. At the end of the assessment exercises, students and lecturers were asked to provide feedback about the methodology of the assessment. In general, students found the group reflection useful and successful, as it was clear that their opinions were being taken into consideration. Lecturers, on the other hand, relished the opportunity to engage in a dialogue about their pedagogical approaches and performance. Both considered the exercise will have a very positive impact on the improvement of the SAPs.

The ILRR registered the following total number of responses:

Future Explorations - 13 Go for a Digital Product - 17 Preventing the Social Exclusion of Young People - 8 Smart Everything - 13 How to Navigate Through Unfamiliar Contexts - 2 Challenging Game Development - 16 Design of Cold Formed Steel Structures - 17

IPCA's institutional FASA is conducting a content analysis of students' feedback, whose results will be shared. A preliminary analysis indicates that the overall impression expressed by the students is positive. Learning outcomes described include both technical and soft skills. Students also express a wish for similar learning opportunities and further development of the projects conducted during the SAPs. Examples of areas

in need of improvement are: number of contact hours, time management, lack of previous knowledge and soft skills. Students express a very strong interest in increasing the length of face-to-face interaction, in order to improve focus and attention, facilitate a sense of community and manage overlapping obligations.

The following section provides excerpts from students' responses to the ILRR.

1.1.3 Feedback from the Participants

Phase 1

"I feel I have achieved a very strong foundation in the concept of circular design and the circular economy, and I have learned lots about the various areas concerned, specifically the current state of the art ideas and opportunities, but also key challenges."

"I think the different breakout room activities and exercises were great and really helped to digest the content from the lectures."

"I wonder what it would be like if the participants came from a little more similar backgrounds to work on more focused projects and problems, for example just fashion industry students/designers."

"I feel the presenters did their best to keep participants engaged, however I feel an inperson opportunity to learn would be more effective."

"I found it difficult to concentrate on the online classes. I feel the presenters did their best to keep participants engaged, however I feel an in-person opportunity to learn would be more effective."

"I made an amazing prototype with my team, and I felt I have finished this experience with more knowledge about game development and about world problems and how could use games to show it. I think I gained more confidence, improved my social skills, found new ways to look at existing problems, and one important thing, I met amazing people."

"I found it excellent, since we were given the tools to develop a game and then we were put to work by ourselves, but always in contact with the teachers and coaches, improving our independence."



"It was very good to understand the thought process that needs to happen to build a game."

"The timeframe to make a prototype was a little too short."

"Other things that I probably change would be the time of the last tutorial unity/gamesalad, probably having this lecture/tutorial earlier would be better I think."

See also reports in Annexes 5.3.4. and 5.3.5.

Phase 2

"My planning capabilities have been reinforced. I made sure to keep the team on task and not get too ambitious with the features we could include, making sure to keep in scope the time allotted and relative abilities that would limit us. I also improved at pixel art, and learned a lot about the craft, especially thanks to Marcus."

"I am going to use the skills I learned to create game assets in my future academic career in Game Art and Design, as well as hopefully in my future professional career. These skills will also help me improve in my artistic skills. I will also use the skills I learned when working together in groups in the future, such as learning how to split up work for everyone's strengths, how to adapt to changes, and how to work well with others."

"I had a lot of positive emotions during this SAP, as I was very happy to learn and was also very satisfied with our final project. Being able to visit IPCA was also a great mood booster and it was very exciting to be working in a different college than I am used to. However, the short time frame made the end project a little stressful, but not to an incredible amount."

"Enjoying the SAP kept me interested in learning, and I came out of the program happy to take part. I was also able to create more assets due to my teammates and myself being happy with my work. The general atmosphere of the in-person sessions were very upbeat, and that made it easy to work too. Even the stress of creating the game kept me focused and motivated to create more, as opposed to slacking off the whole time."

"I wish there was more options for in-person learning, as I think this would have helped me learn a lot more than online. I also wish we had more short group activities to get to know each other better."

"As I stated earlier, the programming is somewhat vital to this, would have been helpful if we could have gotten a longer tutorial, since some people already know another language they could have picked it up faster, at least."



"I loved the diversity of the course. I am so grateful to have met such a kind, fun, lovely group - genuinely! This has been an experience I will always hold in my memories + heart. Thank you so very much."

"This experience will certainly help me in my professional career. I now have better tools to work in a group with professionals from different fields than myself. It is easier to understand how their ideas and solutions might differ from my own, and it will help with coming up with a compromise."

"A lot of these skills I learned are a must in my future work field. Especially how to work with different people and their needs."

"I wish that there would be more brainstorming and things that helps you understand habits of different cultures."

"I was hoping for more mobility oriented problems, especially from the company partners. It was great that we had real-life problems included into the project, but I do feel like both were more logistical problems rather than mobility problems."

"[I liked] Meeting new people from many different culture and interact closely with them, it really forced me out of my comfort zone, which is good."

See also Annex 5.6.

1.2. Completed SAPs and Ongoing SAPs

In this subchapter, we present the majority of SAPs carried out so far by the alliance. A brief summary description of the SAPs, the graphic flyers, as well as the learning outcomes will unfold.

The Challenge SAPs that had only the physical mobility, during the General Assembly in Finland, will be presented in a different format, only with a short description and its learning outcomes.

All the SAPs will be introduced in chronological order.

1. Design Expedition: Emotional Intelligence meets artificial intelligence



The Design Expedition: Emotional Intelligence meets Artificial Intelligence is a RUN-EU Short Advanced Programme (SAP), jointly coordinated by HAMK and IPCA, offering an experimental learning journey to emotions and artificial intelligence during a 1-week online workshop, from the 8th to the 15th of February, 2021.

All RUN-EU students from any level of studies are invited to participate. Participants will be grouped in multidisciplinary and multicultural teams.

The Challenge is to create a solution for the interactive future customer experience of a grocery store visitor. Participants must create a solution which encompasses the possibilities connected but not limited to Computer Vision, Emotional Intelligence and Artificial Intelligence Applications.

Learning Outcomes

At the end of this RUN-EU SAP students will be able to:

- Apply critical thinking, creative problem-solving concepts and design thinking models and tools for solving combined business design, emotional intelligence and artificial intelligence learning challenges
- Work in multidisciplinary, multicultural and co-creation environments
- Communicate information, ideas, problems and solutions to both specialist and non-specialist audiences clearly
- Propose solutions for societal real problems and challenges that demand innovation and a varied set of skills



2. Circular Plastics Design



Circular Economy is a hot topic and a trendy term. However, what does it really imply for industry, for society, and for development? What are the existing and the emerging challenges?

Every drop of water on the planet has been here for millennia, in a constant cycle of renewal. The aim of circular plastics is to take this approach to plastics and earth's finite resources. The broad picture of the circular economy is defined by (Murray et al., 2017) as "an economic model wherein planning, resourcing, procurement, production and reprocessing are designed and managed, as both process and output, to maximize ecosystem functioning and human well-being". The revised Waste Framework Directive (WFD), adopted on 30 May 2018, sets out a greater ambition for prevention, preparation for reuse and recycling than ever before, acknowledging that a more Circular Economy could significantly reduce greenhouse gas emissions associated with resource extraction and production as well as creating many new jobs. The Environmental, social and economic benefits of circular based process and output operation are significant: Firstly, these activities keep goods within the economy and thereby reduce waste production, leading to a reduction in raw material extraction, manufacturing and transport. Secondly, these activities avoid the creation of recalcitrant wastes and the need for elaborate waste management. Thirdly, the EU acknowledges that circular economic implementation has the potential to positively impact social and economic benefits including jobs and growth, the investment agenda, the social agenda and industrial innovation.



D6.7

But how to explore and apply strategies of Circular Plastics for Product Design, in the scope of EU Circular Economy Policies, in order to improve sustainability of both product life cycles and companies? And how to take advantage of the resulting opportunities for new products and material life cycles, as well as new circular business models?

This short program<u>me</u> aims to present insights into these topics and examine some existing tools that can help designers, engineers, managers, and entrepreneurs. The underlying principles, concepts and tools are quite relevant in the current global economy in a plethora of thematic areas, and applicable to any industrial sector, although this program<u>me</u> will have a particular focus on sectors related to Plastic products.

Learning Outcomes

At the end of this programme, students will be able to:

- Appreciate current driving features for sustainability in a multidisciplinary and international context;
- Understand the concepts of circular design, circular economy, circularity, and ecodesign (among others);
- Recognize the key challenges and opportunities for improving circularity in plastics, and how to quantify it;
- Understand the different perspectives of ecodesign / design for X;
- Understand circular supply chains and sustainable business modeling.



3. How to navigate through unfamiliar contexts: Enhance your study skills and future skills



To face the challenges demanded by a changing and uncertain world, we need a variety of skills to navigate through unfamiliar contexts. These kinds of skills are called generic competences or future skills. These skills include for example collaborating with others, problem solving, flexibility, and taking responsibility. Also, balancing with contradictory demands requires empathy, compassion and respect towards oneself and others. Moreover, skills to learn in a self-directed manner and reflecting on one's own development play an increasingly important role in the future of work. Overall, future skills are important for employability and success in the world of work and most importantly, they have the potential to enhance individual and collective wellbeing. The aim of the SAP is that the participants recognise the importance of future skills and set goals for developing their own future skills.

Learning Outcomes

During the SAP the students will:

- Familiarize themselves with various definitions of future skills;
- Utilize this information to develop proactive strategies that can be used in navigating in unfamiliar contexts;
- Think about the requirements for successful working in multidisciplinary and multicultural environments;



- Unravel one's own conceptions of learning and learning practices, and recognise learning as an important future skill;
- Recognise how future- and study skills are related to one's well-being and propose solutions for enhancing wellbeing;
- Evaluate the development of your own future -and study skills on the basis of given feedback and self-assessment.



4. Game Changing Games

The complexity of global challenges is constantly rising.

Can we change the game with games?

Taking this question as a starting point, in this short advanced programme our goal is to understand how game designers can address these complexities to incite change, fostering the sustainable co-existence of humans and the ecological systems. Creating games that motivate people to engage with these topics in a playful way could be one way of making critical issues intelligible and experienceable.

To be able to better discuss this topic, a set of specific details needs to be understood, namely:

- ➤ Game Cultures
- Dimensions of sustainability
- Best practice (project presentations);



- > Playful methods in future design (e.g. speculative design);
- Approaches to and methods of game design;
- Designing digital games, urban games, social impact games, serious games, mixed reality games, alternate reality games;
- > Design and implementation of social interaction in games;
- Game content and design considerations to evoke motivation;
- Creation of immersive environments and affective infrastructures (e.g. for exhibitions and/or in the museum context);
- > Motivation to play vs. motivation to change beliefs, attitudes, and behaviors;

Learning Outcomes

At the end of this programme, students will be able to:

- Know crucial concepts and approaches of game design, theoretical approaches and indices of ecological, social and economic sustainability;
- Be capable of developing and prototypically realizing a concept focussing on future challenges (e.g. climate change, social segregation, digital divide) using games as a medium or creating playful experience(s);
- Work in multidisciplinary and multicultural teams;
- Communicate solutions for societal real problems and challenges that demand innovation and a varied set of skills.

5. RUN-EU Sustainable Development - Social Enterprise SAP Challenge

SAP Challenge Statement: Community resilience in sustaining rural communities is needed using real life solutions-based approaches based on economic, social, cultural and environmental areas, anchored around the United Nations Sustainable Development Goals (SDGs).

The RUN-EU Sustainable Development –Social Enterprise Challenge seeks to apply from interdisciplinary teams proposing novel, sustainable solutions to the challenges outlined (and other challenges identified by the students). With this challenge, we are asking teams to propose innovative practices in respect of community resilience in achieving sustainable rural communities. There is a need for greater clarity in respect of what resilience means and by how it can be achieved. For example, individuals/communities working collaboratively, social enterprise, community cooperatives, social farming etc.



This challenge involves investigating future needs and opportunities, engaging in visionplanning and future-proofing exercises and all the time aligning with the UN SDGs.

Learning Outcomes

At the end of this challenge-based SAP students will be able to:

- Apply critical thinking, creative problem-solving concepts and design thinking models and tools for solving societal challenges;
- Work in multidisciplinary, multicultural and co-creation environments;
- Communicate information, ideas, problems and solutions to both specialist and non-specialist audiences clearly;
- Propose solutions for societal real problems and challenges that demand innovation and a varied set of skills.

6. RUN-EU Bioplastics SAP Challenge

SAP Challenge Statement: Bioplastics as a key driver for innovation within the plastics industry and will play a leading role going forward. In order to reach circularity and fossil-decarburization formulated in the concept, it is highly important to create a strong link between Bio-economy and circular economy. The challenge proposed is to consider bioplastics that can be used as alternatives to single-use plastic (SUPs) with particular consideration for replacing for example Personal and Protective Equipment (PPE) that has increased in usage during COVID-19 pandemic.

Bio-based plastics can make a strong contribution as they use sustainably sourced biomass as feedstock for their production. They help to diminish the dependency on fossil resources and reduce the emission of greenhouse gasses. Mechanical or chemical recycling of those bio-based plastics further adds to the reduced environmental footprint of these products. The same applies for biodegradable and compostable plastics as they increase recyclability-options by adding composting and helping to create clean organic waste streams. European Bioplastics (EUBP) also focuses on sustainable products as well as on packaging. In this regard, EUBP looks forward to closely working together with the new Commission in order to create a sound regulatory framework for the use of bio-based as well as for biodegradable and compostable plastics.

Learning Outcomes



At the end of this challenge-based SAP students will be able to:

- Apply critical thinking, creative problem-solving concepts and design thinking models and tools for solving societal challenges;
- Work in multidisciplinary, multicultural and co-creation environments;
- Communicate information, ideas, problems and solutions to both specialist and non-specialist audiences clearly;
- Propose solutions for societal real problems and challenges that demand innovation and a varied set of skills.

7. RUN-EU Eco-innovate SAP Challenge

SAP Challenge Statement: Ecologically sustainable, organically based, alternative solutions to peat based horticultural growth media are required to address the impacts of peat harvesting on Climate Change. Innovative use of organic waste media from food service or food manufacturing industries may provide the solution. This Challenge addresses Global Climate Change, Social Innovation and Sustainable Industry Goals.

Peat moss comes only from one source, that of peatlands, which are finite in nature and of significant importance to climate change action and carbon fixing. A change in practice needs to occur to provide a sustainable growth medium with the same characteristics going forward as peatlands are a significant carbon sink. Peat harvesting not only causes destruction to the habitat but releases significant carbon back into the atmosphere. The European Habitats Directive(92/43/EC) and the Environment Impact Assessment Directive (85/337/EEC) commits EU member states to the protection of peatland habitats and for sensitive peat extraction. This aligns with three of the UN's critical sustainable development goals (SDGs) "Responsible consumption and production"; "Climate Action" and "Life on Land". In particular SDG number 13.2and 13.3target a total ban on peat extraction by Producer countries within the EU and improving education and awareness on mitigation of peat harvesting impact. All EU member states must provide alternative and sustainable peat solutions by 2024.

Learning Outcomes

At the end of this challenge-based SAP students will be able to:



- Apply critical thinking, creative problem-solving concepts and design thinking models and tools for solving societal challenges;
- Work in multidisciplinary, multicultural and co-creation environments;
- Communicate information, ideas, problems and solutions to both specialist and non-specialist audiences clearly;
- Propose solutions for societal real problems and challenges that demand innovation and a varied set of skills.

8. RUN-EU Food Challenge

Food loss and waste represent massive systemic inefficiency and are unsustainable. Shall we do something about it? Global stability in the 21st century is underpinned by the ability to mitigate the effects of climate change, resource scarcity and food security. A major factor in all these issues is the food waste (FW) generated from the food supply chain, which can account for up to 1.3 billion tons per annum, equivalent to a third of the world's total food production, estimated that one-third of all food produced globally for human consumption is lost or wasted. The current levels of food waste generation are unsustainable. The European Waste Directive commits EU member states to reduce their food waste by 25% by 2025. This aligns with one of the UN's critical sustainable development goals (SDGs) "Responsible consumption and production". SDG number 12.3 and 12.5 target transformation of "the entire food value chain from farm to fork", calling for a 50% cut in per capita global food waste at retail and consumer levels and the reduction of food losses along production and supply chains, including post-harvest losses, by 2030.

Learning Outcomes

At the end of this challenge-based SAP students will be able to:

- Apply critical thinking, creative problem-solving concepts and design thinking models and tools for solving learning challenges;
- Work in multidisciplinary, multicultural and co-creation environments;
- Communicate information, ideas, problems and solutions to both specialist and non-specialist audiences clearly;
- Propose solutions for societal real problems and challenges that demand innovation and a varied set of skills.



8. Future Explorations



Eligible participants: RUN-EU students from all cycles of studies Deadline for applications: 14 February

Organised by FHV, TUS and HAMK +INFO: www.run-eu.eu

Global challenges form the starting point of this Short-Advanced Program, which draws on methods of future assessment, design and innovation development to explore pathways to ecologically and socially sustainable futures. Each "edition" of "Future Explorations" focuses on one challenge area, the first being mobility and transport.

How can mobility be imagined and conceptualized in a new way?

How can we foster more sustainable modes of transport?

Concrete challenges will be developed with the involvement of corporate partners. Based on the examination of different future scenarios, we will develop technologically supported as well as communicative solutions fostering sustainable development in this field. Starting with an online week, an interdisciplinary team of lecturers and coaches will give input and guide the students in developing their concepts. The online week will be followed by a four week period of remote team work and coaching focusing on elaborating the concepts, which will then be realized in the presidential week in Dornbirn.

Within the frame of "Future Explorations" the students are expected to develop a prototype (proof of concept) (e.g. of a service, application or community model).

Learning Outcomes



The students will be able to assess future developments:

- They will be able to develop and implement innovative technologically supported and communicative solutions addressing future challenges.
- They will be able to combine theoretical knowledge as well as methodological competences in the process of innovation development and implementation.
- They will be able to work in an interdisciplinary team and face a final presentation including a panel discussion.



9. Preventing the social exclusion of young people

Eligible participants: AS RUN-EU Degree Students Deadline for applications: 18 March

+INFO: www.run-eu.eu

Young people are among the most vulnerable in society, particularly during a serious economic downturn 1 out of 5 children live in families that are at risk of poverty, and more than one third of young adults (18 and 24) in the European Union are currently unemployed and not in education, employment or training. Social exclusion doesn't just affect people who are materially deprived. Approximately 1 out of every 3 people in Europe face social exclusion. Creating an inclusive community was a primary goal in the process of European integration from its start and the latest economic crisis placed new weight on this objective.

Learning Outcomes

At the end of this RUN-EU SAP student will be able to:

• Identify and demonstrate knowledge of the major concepts, theoretical perspectives, and historical trends;



- Apply critical thinking to provide practical solutions to problem-based scenarios or social issues commonly encountered in the field;
- Understand and apply inclusive and digital guidance methods to enhance the well-being of young people and help prevent social exclusion and promote health and wellbeing; analyze and support the development of the growth environments of young people in order to strengthen inclusion;
- Work in multidisciplinary and multicultural teams;
- Communicate solutions for societal real problems



10. Go for a Digital Product

Featuring a design challenge for a digital product for advancing physical health, this Short Advanced Programme (SAP) brings together engineering and design students to improve people's lives. The programme invites students to explore possibilities of digital technology to advance physical health.

The participating students learn how to apply design thinking in digital product development and how to run an innovation process in an international multidisciplinary team. The students gain knowledge of the specific technology to be used in the design challenge and learn critical elements in the nexus of technology and design.

The students work in teams coached by teachers specialized in digital technologies, design, and health application. The teams are built on student's strengths and complementary skill sets.



The programme nudges students to move beyond their comfort zones, to find a common language with others looking at the issue from a different perspective, and to work together to build a solution to the design challenge.

In 2022, the SAP will tackle the challenge to advance the physical health of students. In the coming years, the SAP will feature different design challenges for a digital product. The exact challenge topic will be published in the beginning of the first mobility week.

Learning Outcomes

Students will explore how it is to work as a member of a team designing a product concept and a product prototype for a digital product. The design/industrial design students will get hands-on experience on working with the development tools for products where electronics, microcontrollers, digital communications and data play a main role. The Engineering/Computer Science students will learn the design thinking and what are the methods on developing the product concept and the product design.

11. Smart everything: the future of digital lies in the co-creation of business and IT



Eligible participants: All RUN-EU degree students Deadline for applications: 13 March 2022

+INFO: www.run-eu.eu

The course introduces students to how new technological developments, interconnectedness, and product development with visual programming and AI, IoT, or AR are applied. It will do so with an industry-focused curriculum across multiple sectoral domains. It would allow the participants to appreciate the sectoral applications of digital development, responsive devices, automation, and optimization. It establishes a connection



between these technologies and business methodology and opportunities. The participants will amalgamate the learnings with a cross-functional perspective and take those lessons with them into their academic and professional lives.

This course invites the urgent coordination between the makers (IT) and the marketers. It rethinks the practice of design, development, and consumer relationship into a more collaborative process. Co-creation has proven to be one of the most successful ways to generate value, enrich consumers' experiences, and ultimately create products that seamlessly solve real problems.

Learning Outcomes

At the end of this RUN-EU SAP student will be able to:

- Deliver a feasible smart product prototype that solves a problem presented in the brief;
- Get familiar with the opportunities and challenges offered for the new technological developments;
- Increase the efficiencies and strategies involved in working in international and multidisciplinary groups;
- Establish a unique network of professionals and international cooperation.

12. Challenging Game Development



Eligible participants: Students from the areas relevant for game development, computer science/programming, digital illustration and animation, digital media, sound and music.

Deadline for applications: 15 of April

+INFO: www.run-eu.eu



This Short-Advanced Programme is an introductory course for digital game development, covering the whole game development lifecycle, from the idealization to its analysis, creation of a storyboard, preparing assets, codifying the game logic, and testing. These topics will be addressed at a high level, allowing attendees to understand the different development phases, and how they integrate into a game project.

The Challenging Game Development course will not teach programming basics or advanced animation techniques. The main goal is to allow participants to know how to communicate inside heterogeneous teams.

Therefore, and although some programming basics would be preferable, the course aims at allowing a team composed of individuals with different backgrounds and knowledge to work together learning and developing a digital game.

Learning Outcomes

At the end of this RUN-EU SAP student will be able to:

- Design a game idea, preparing its storyboard.
- Know what the different kinds of assets are used in digital game development.
- Understand the way a game engine works, both at the editor and programming levels.

13. Design of Cold-Formed Steel Structures



Eligible participants: RUN-EU bachelor's and master's students in Civil Engineering and Mechanical Engineering Deadline for applications: 27 April 2022

+INFO: www.run-eu.eu



This SAP aims to address the design of cold-formed structures according to the Eurocodes. Special attention is given to the specific challenges involved, particularly concerning structural principles of stability and failure modes not found in the design of hot-rolled and fabricated steel structures.

The increasing growth in the use of the Light steel framing (LSF) systems, due to its sustainability; the use of light steel members for purlins and other secondary elements in current steel construction, and, on the other hand, the complexity related in the design of this structures/members, shows the relevance of this short-course for the industry.

Learning Outcomes

In the end of this SAP, students should have a broad knowledge on the specific issues related to the structural behavior of cold-formed steel elements.

- Students should understand and be able to apply the Eurocode frame-work for this type of structure.
- Students should be able to design cold-formed elements according to the Eurocodes.



14. How to Navigate Through Unfamiliar Contexts

To face the challenges demanded by a changing and uncertain world, you'll need many more skills than those you get from your degree. These kinds of skills are called generic



competencies or future skills. They include, for example, collaborating with others, problemsolving, flexibility, and taking responsibility. Plus, balancing contradictory demands requires empathy, compassion and respect towards yourself and others.

Understanding how to learn in a self-directed manner and reflecting on your development are two essential skills that will play an increasingly important role in the future of work. Developing future skills will raise your employability prospects, and most importantly, they will enhance your – and your peers' – well-being.

This SAP aims to make students aware of the importance of future skills and encourage them to set goals for developing them.

Learning Outcomes

At the end of this RUN-EU SAP student will be able to:

- Be familiar with various definitions of future skills
- Utilize this information to develop proactive strategies that can be used in navigating in unfamiliar contexts
- Be able to think about the requirements for successful working in multidisciplinary and multicultural environments
- Unravel your own conceptions of learning practices, and recognise learning as an important future skill
- Recognise how future and study skills are related to your wellbeing and propose solutions for enhancing wellbeing
- Evaluate the development of your future and study skills on the basis of given feedback and self-assessment.

1.3. Interconnections with other WPs

As described on the first Opportunities Report, RUN-EU objectives are being achieved through 6 development and implementation WPs, which were composed around RUN-EU Mission and Long-Term Vision, and 2 transversal WPs for Coordination & Management, and Dissemination & Sustainability.

Due to the novelty of the format envisaged for the SAPs, the identification of the main distinctive features, the typologies and specific context has been a core activity performed by WP6 as the basic setting for future work on the creation of SAPs. Detailed information on the specificity of each mentioned setting can be found in the D6.3. Standard Guidelines for RUN-EU SAPs. These settings have been directly implicated in



the development of our activities, either from the input and/or output perspectives from other WPs:

• WP2 European Innovation Hubs (EIH)

Future Advanced Skills Identified

- WP3 Future and Advanced Skills Academies (FASA) Skills Needs Bulletin Pedagogical Innovation SAPs development aligned with FASA outputs
- WP5 RUN-EU Discovery Programme
 Research areas identified
- WP4 European Mobility Innovation Inventory of opportunities for mobility within RUN-EU
- WP7 Collaborative European Degrees

SAPs as testbeds for joint programmes and SAPs as Interdisciplinary modules for Double Degrees.

GEMs as generators for new SAPs proposals

During the second part of the project's execution due to the maturity of the alliance, we anticipate a greater interconnection between the WPs. The alliance is notably coordinated by WP1 for a holistic and long-term vision. All WPs relate to each other and all can feed the WP6, namely in the identification of key areas and skills that regions need. This is ongoing and evolving work that needs to be monitored and communicated to all partner institutions.

1.4. Lessons Learnt

Preparing and delivering SAPs is continuous hard work, but at the same time it is very gratifying when positive results are achieved. Considering the delivered programs, the results are undoubtedly very positive. In terms of the European plan for European Universities, we can consider that the SAPs are at the forefront of the future of higher education, namely in terms of micro-credentials. At the same time, we must here affirm that the feedback from the involved students and teachers is constructive and supports the development of the future SAPs. Since the students are the motive and focus of our work, it is extremely important to understand the impact the SAPs have in their professional and personal life. For many students, this is the first time they are on a mobility program and could be the beginning of other international experiences inside and outside RUN-EU. The motto of the students is: WE are One, We are RUN!



Recovering some of the learned lessons from the 14 delivered SAPs we can resume and underline the following:

- 1. An emergent need to communicate more and better the SAPs to the community, considering the time frame necessary for dissemination, implementation of graphic materials which do not always coincide with the timings of the Coordinating professors. In this sense, the WP6 needs to continuously monitor the work and improve the communication infographics and reinforce the importance of taking in consideration the timing, that is why we added a consideration of the timeframe in the improved infographic.
- 2. Considering the need for better communication, the WP8 has been involved in delivering workshops for the graphic designers on how to better and efficiently implement the templates of the programmes of the SAPs. From these workshops emerged the need to improve the material that will be implemented, together with the SAP's platform.
- 3. Development of the International experience in the development of Joint *Programmes*. Most staff are used to cooperating in the international field, establishing international partnerships, visiting international partners, attending international conferences, belonging to international networks, developing projects, participating in teaching and training missions, among other activities. However, the development of a joint programme brings international cooperation to a different level, which demands greater effort and needs to be nurtured, facilitated, and institutionally recognized.
- 4. *Collaborative work and balanced contribution*. The degree of jointness envisaged for the SAPs development and implementation relies on a:
 - Co-creation environment and attitude;

- Balanced contribution in all phases; Clear definition of roles, tasks and responsibilities;

- Clear and shared decision-making;

Communication platform and channels (before, during and after the SAP) and
 Careful preparation.

In addition to the Joint Coordination Team (SAPc), joint ownership rationale, joint application form, joint selection procedure, joint assessment, it should be embedded in the way the SAPc communicates internally and externally (SAP email; Kick-off; invitations, integration of coaches and guests, jury panels, etc).

5. *Team building*. Participants' team building activities integrate the introductory part of the SAP and should not be underestimated. Team formation together with the management of the learners' expectations and of the different

backgrounds and contexts are of crucial importance. Learners must receive clear indications and the necessary support and guidance along the whole process.

- 6. Increase the transnational mobilities. Considering that the mobility of professors and students at RUN-EU has complex organizational impact, considering the procedures of each institution, it is necessary to establish times for the preparation of travel logistics. The Step by Step timeframe already defines these timings, but we will have to make an effort to fulfill them without compromising the RUN-EU objectives. We will also make an effort to balance and increase the mobility numbers of partners.
- 7. Defining the "Programme at the glance" and "Detailed programme". Considering different interpretations of concepts and different organizational and academic cultures, WP6 should arrive at universal definitions of concepts within the RUN-EU, considering that these concepts and definitions will be fundamental for the transparency of the process and future recognition within the European university.
- 8. The RUN-EU partners have different legal systems, frameworks and policies on higher education. This makes it sometimes challenging to work with the same certificates and the same way of working when it comes to certification of the SAPs. WP6 is working continuously on improving the formats for certification and making sure that an optimal situation is reached on the matter of issuing certificates for SAPs.



2. New Potential SAPs

2.1. Methodology for Identifying the Potential RUN-EU SAPs

Phase 1: Joint Development and Implementation

The methodology for identifying the Potential RUN-EU SAPs implemented through ongoing institutional surveys in all the institutions of the alliance.

The surveys, as stated in the D6.1 RUN-EU SAPs Opportunities Report have a 2-step process. Initially, the survey is shared with the academic staff, such as researchers, Deans, Directors of Pedagogical or Research Units in the partner institutions and all the information collected is aimed at identifying potential RUN-EU SAPs.

Once the list of potential RUN-EU SAPs is treated and validated and the partnership confirmed, the "green" SAPs proceed and are invited to the 2nd phase of joint development and implementation, where the SAP coordinators jointly agree on the format and jointly develop the detailed programme.

The final data collected from all the partners is analyzed and compiled by the WP leader into an internal Excel report available to all the relevant members on the internal Teams Channel. The instant access provides the possibility to assess and design the identified SAPs. This task is focused on searching for quick-win opportunities to create SAPs from the degrees and activities of the RUN-EU network.

By now, two surveys have been carried out. The first survey was concluded successfully on the 24th of February of 2021. The results of the 1st survey can be consulted in the D6.6.

The second survey was concluded successfully on the 1st of March of 2022. The detailed results in the current document.

The 3rd survey will be launched at the end of the current year/ beginning of the upcoming year.

In addition to the Surveys, WP6 is available to receive proposals during the rest of the year, considering the need for flexibility and openness to new ideas and synergies between partners. The high interest raised so far, the strong identification with the SAPs format, the dynamics of this initiative and the different response times of Faculties and Departments originated the implementation of an Open Call approach in addition to the annual Surveys.

The information requested in this 1^{st} phase can be found in Table 1: Survey Fields | 1^{st} Phase of the D6.6.



Once the list of potential RUN-EU SAPs is treated and validated and the partnership is confirmed, the SAPs that meet these conditions can then proceed to the 2nd Phase.

Phase 2: Joint Development and Implementation

The RUN-EU SAPs validated according to the terms described in Phase 1 initiate the 2nd phase of preparation and development. In this sense, the SAP coordinators start with the preparation of the **List of RUN-EU SAPs Critical Elements** (can be found in Table 2 of the D.6.6.) to be completed by each SAP. In the meantime, we have added some improvements in the section "Certification" and these changes are underlined in Table 1: List of RUN-EU SAPs Critical Elements (Certification section).



Table 1: List of RUN-EU SAPs Critical Elements (Certification section)

Once the SAPc has jointly agreed on the final format and has fully developed the detailed programme and more complete information according to the List of RUN-EU SAPs Critical Elements, a conformity check is carried out by WP6.

Only at this stage learners, students and candidates have access to the final materials and the RUN-EU SAP is publicly launched and disseminated.



2.2. Second Survey on Potential RUN-EU SAPs: Results

As mentioned before, WP6 has launched 2 Surveys to identify the relevant topics of the potential SAPs. Each WP6coordinator (WP6c) has conducted these launched surveys in their own institutions and then presented the results of the Surveys on potential SAPs. All data has been organized on a single file which englobes all the potential SAPs considering the scientific/pedagogical area, connection with the RUN-EU Future European Innovation Hubs, ECTS Credits, foreseen duration, mode of delivery, typology, target audience, etc. This data is a work in progress since the SAPs are always in development and new data is continuously added, a summary of this work in Table 2. SAPs from 2nd Survey.

Ansa	SAP Title	Goord	Joint Count.	Dates	State	Conformity Check
	Design expedition (Second Edition?)	HAMK	IPCA	2022	Green	No
	Navigating Business in the Digital Marketing Age	NHL	TUS	Spring 2023	White	102 m
	General Management Simulation	tity			White	
	E-Procurement as a tool for Decision Making	IDC'S.	1	2	White	-
Buitinger E	The Clobal Engenment Franke Chains	175.0			white	-
Management.	Interstopal Economy and Supply Chains	511			White	-
Selected	internacional Business Practices	ML		2	woke	-
acterious	Supply Chain Management Master Courses (1st Edition)	521			White	
	Supply Chain Management Master Courses (2nd Edition)	SZE			White	-
	Practical methods for Logistics 4.0	525			White	
	Sustainable Europe: A Vision and Practice into Sustainable Growth	HAMK	IPCA	Autumn 2023	Green	No
	Same Changing Game (Second Edition)	THY	IPCA, NHL	nov/22	Green	No
	Textured marratives clay	IPCA	IPL, TUS (LIT)	TB0	Green	No
	Future Design	NHL		180	White	
	The right balance between innovation and protection	IPCA	E commo		White	
	Living Playground/Landscapes for living	IPL.	HAMK	a contract	White	-
	The contribution of drawing in the enhancement of cultural heritage	IPCA	TUS (UT)	2022	Green	No
Educational	Critical Thinking	iPL	5	September 2022	White	
Sciences	Mathematics education in day care context	iPL.	HAMK		White	
sciences	Agele Service Architocourte	UKA	TUXAID HHV	TEST	Ret	
	Computational intelligence	100	I IFCA		Red	
	Data Analytics & Machinel Learning	111	IRCA		White	
	Digitalisation of Monufacturing	LTT.	THEY, HAMLE, IPL	1	White	2 (d) — — — — — — — — — — — — — — — — — — —
	Circular Plastics Design (Second Edition)	IPCA	TUS	TBD	Green	
	Collaborative robotics and industrial intelligence in a sustainable context	IPCA		October 2022	White	
	Simulating complex realities with serious games	NHL	1	Nov-Dec 2022	White	
	Fundamentals of (Maritime) Cyber Security	NHL	<u>i</u> .	Fail 2022	White	10
	Software Engineering for environmental technologies	THY	6	2	White	
Engineering &	Machine Learning for eHealth and Wellbeing	IPL	2		White	-
Technology	Industry 4.0 in Logistics and Supply Chain	- 521			White	-
	Introductions to Data Mining with Examples	IPL			White	
	Manufacturing project and lean six-sigma	IPCA	10. 10.	6	White	
	Robotics and Al	IP1	16	3 —	White	
	Finite Bements Using Python	IPL	FHV		White	-
	Numerical Methods with Python	IPL		-	White	
	Least Squares Methods with Python	IPL	5		White	-
	Ordinary Differential Equations Methods with Python	IPL	110000	-	White	
	iuroneixperience	PCA	HAVIX		white	
Food & Technology	Technology and applications of phytochemicals (tentative proposal under	IPL		George Contraction	White	
E1	Safe Seeds Supply for the future	HAME	525	8-12.5.202321-25.8.20	Green	No
	Gender - Diversity - Human Rights	FHV	SZE	2022	White	
	Critical Thinking for future professionals	NHL		Fell 2022 or Spring 2023	White	-
	Perspectives on Mental Health: Systems, Challenges and Wellbeing in the C	FHV	TUS	6 0.00	White	
	Promoting health: a practical approach	FHV		G	White	-
	Living in the European Union	IFCA	2	-	White	
	Entrepreneurship, social Innovation and volunteering	IPCA			White	
Social Sciences	Who are we? Mapping the identity of the KUN-EU-er	MI	HAMK, FHV, TUS, IPL	October 2022	Green	Ne
	Procedure and Case-law of the European Court of Human Rights	IPL.		-	White	-
	Alternative Dispute Resolution	IPL		-	White	
	Inservention of the social Work in situations of social emergency	IPL IPL	105	-	white	
	Assistive recinicity bootcamp	101	The		White	
	Lind-on-Line and Geneticity	in	inv		White	
	Comparison of costo ecological management operation	HEARY		-	White	-
	Comparision or socio-ecological management practices	MARK .	A/7 (0)	750	WIDE	
	A character approach to development of tourism products: gastronomy	Inca	All, PL	150	White	-
	Postaneous and accessible tourism in natural areas	APGA NO	700	101y 2022	White	
Tourism	Trends in Sustainable Local Development	STALL STALL	103	- spring 2025	White:	-
	Sustainable Tourism Destinations	IPCA.	IPU NAL THE	October 2022	Green	No
	Sectionable Tourism Products (2nd Spition)	IFCA	IPL NHL TUR	May 2028	Grant	No
	The second	10 10 10 10	the second second	inter a constant		



Table 2. SAPs from 2nd Survey

A system of five different colors was implemented, identifying the development stage of each SAP proposal.

Green	Complete with partnership validation. Ready to move to the 2nd phase
Blue	Complete but waiting for partnership validation after contacts made or in negociation
White	Partner Search List (no contact made and partner identified)
Red	Removed/ Eliminated
Yellow	Newly submitted
Dark green	Completed

3. Next Steps on WP6

3.1. Recognition Challenges

Recognition in general is varied within the RUN-EU alliance. National and legal frameworks are different in each partner institution, varying from very rigorous ones to more permissive ones when it comes to recognition. Considering these variances, the automatic recognition of study periods, which is an aim of the RUN-EU alliance, seems very challenging.

The challenges that must be tackled together are numbersome. First and foremost, the recognition of ECTS credits earned by students at one partner institution by the other partners is not seamless. An important reason for this is that even though all partner countries are members of the European Higher Education Area, the Bologna Process has not been implemented entirely by all partner institutions. This means that seamless or automatic recognition of ECTS credits is more complex and difficult due to the lack of ECTS guides and course catalogs or the lack of permission for issuing a ToR, for instance. Secondly, the term 'study period' is interpreted differently at the partner institutions, making recognition more complicated. Thirdly, as regards the recognition of SAPs, we also experience dissimilarities, as seen below (Automatic recognition of study periods, pp. 10-11), mainly due to the different national and legal frameworks of the partner institutions.

A short description of the state of art in all the partner institutions of the alliance

Vorarlberg University of Applied Sciences (FHV)

FHV doesn't face major challenges regarding the recognition of SAPs. The necessary internal processes have already been implemented.

SAPs are seen as an additional offer to the existing study programmes.

Any SAP can be recognised at FHV.

- The Programme Directors are in charge of deciding whether a SAP can be recognised for a compulsory or elective course.
- If this is not possible, the SAP will be included as an additional study experience in the Diploma Supplement.

The next step:

- Elective modules should be included in each study programme to facilitate the recognition of SAPs as part of the regular study programme. This is already the case throughout the Master's programmes at FHV; in the Bachelor's programmes, corresponding elective subjects will be included in the course of the regular revisions of the study programmes.

Häme University of Applied Sciences (HAMK)

HAMK does not face many challenges for recognition.

- At HAMK the recognition process considers SAPs as part of the learning path
- Pre-check of the recognition is done before the Registration by the Guidance Counsellors;
- The SAP is recognised as part of optional studies if it cannot be recognised as part of core competence studies within the degree programme.

The next step:

- Steering committee is working with the Deans and Head of Degree Programmes in order to include the SAPs into the existing modules.

Instituto Politécnico do Cávado e Ave (IPCA)



The SAPs are included in the Diploma Supplement. The next steps:

- Internal discussion with the Deans and Heads of Degree Programmes in order to evaluate a more adequate way for the SAPs recognition;

- Internal discussion in course to include the SAPs into the existing modules (for example, IPCA can present the "Circular Design with Plastics" SAP as a part of the Ecodesign Unit Course in Industrial Design BA).

Politécnico de Leiria (IPL)

All SAPs are recognised as relevant extracurricular learning experience/activity in the Diploma Supplement through a Transcript of Records (TORs) There is the possibility to use SAP Credits to be credited in other training programmes offered by the institution.

NHL Stenden University of Applied Sciences (NHL Stenden)

The recognition of a SAP is difficult, as they cannot be part of the curriculum of a study programme due to regulatory restrictions. Therefore, SAPs can only be considered extra-curricular and as such, they cannot be included in the included in the Diploma Supplement issued as part of the degree certificate awarded by NHL Stenden. According to Duch Law the Diploma Supplement only shows the exact, fixed number of ECTS credits per level (Associate Degree, Bachelor Degree and Master Degree).

NHL Stenden cannot issue a certificate of participation or a ToR as the current format does not meet legal requirements under Dutch law.

NHL Stenden can however co-sign certificates issued by another RUN-EU partner (not the ToR).

Széchenyi István University (SZE)

Recognition of SAPs is somewhat challenging as they cannot be a part of the curriculum of a study programme.

SZE recognises SAPs through Professors and Programme Directors as they are in charge of deciding whether a SAP can be recognised for or as part of a compulsory or elective course.

The next step:

- A unified system for the recognition of SAPs will be developed in the near future.

TUS

A draft Micro-credentials policy has been developed and is awaiting review from the Academic Council.

Based on the exposed information, it is clear that the partner institutions are in diverse maturity level regarding recognition of SAPs. Nevertheless, despite the challenges, positive trends can be observed. FHV and HAMK have already implemented the necessary internal processes for the recognition of SAPs, TUS has been awaiting review of the already developed micro-credentials policy, whereas IPCA and IP Leiria recognise SAPs in the Diploma Supplement. However, NHL Stenden and SZE cannot recognise or include the SAPs in the Diploma Supplement, due to their more rigorous national law, but SZE can recognise SAPs through Professors, and especially Programme Directors as they are in charge of deciding whether a SAP can be recognised for or as part of a compulsory or elective course. The Dutch law seems more demanding as it requires adherence to strict rules when it comes to issuing a ToR. These rules have not yet been included in the ToR format developed in WP6.

Considering the positive trends and steps taken to the smoother recognition of study periods and ECTS credits gained abroad, it can be said that SAPs can be recognized to some extent or somehow by the partner institutions. Being aware of the fact that this way of recognition is not equal to the ideal one, namely the use of micro-credentials as envisaged by the European Commission, RUN-EU alliance, and WP6 in particular still has a task to do in this regard.

To face the challenges demanded by different national and legal frameworks as well as internal regulations of the partner institutions regarding recognition, a common ground must be found within RUN-EU alliance, especially because RUN-EU aims at producing a



framework and set of recommendations and guidelines for automatic recognition of study periods and qualifications earned abroad within the alliance (RUN-EU project application, p. 15). In order to do so, an Inter-University Recognition Team (IURT) has been set up within WP7, including experts in the field of recognition from each partner institution. The IURT deals not only with the recognition of collaborative degree programmes, but with that of SAPs as well, therefore a tight cooperation between WP6 and IURT is expected and needed. We strongly believe that, by making mutual efforts, this cooperation is going to lead to a solution, acceptable to all partner institutions, regarding the automatic and full recognition of SAPs soon.

WP6 will also continue following very closely the debate for the creation of a European framework for micro-credentials and the conclusions of the Consultation groups, which are completely aligned with the SAPs objectives and format, as also stated in D6.1 RUN-EU SAPs Opportunities Report.

3.2. Partnership with Industry

The first Opportunities Report concluded that the SAPs are expected to be responsive to local industry and community needs, able to answer to emerging trends and fill knowledge and skills gaps, becoming part of a lifelong learning broad strategy. Therefore, the analysis of the educational offer, the alignment between (skills) supply and demand, the identification of skills signaling mechanisms and the compilation of reliable labor market information sources are some of the topics which demand WP6 constant attention.

This topic will be supported in the interconnections with other WPs: Skills Needs Bulletin from WP3 and the results from Future Advanced Skills Identified by WP2.



4. Concluding Remarks and Challenges Ahead

These eighteen months of activity were very intensive and full of developments. WP6 developed 14 SAPs with the support of several teachers from all RUN-EU partners. We started, during the pandemic, with pilot SAPs (8, including 4 pilot SAPs during the General Assembly), but in recent months we managed to carry out, with extremely positive results, a set of SAPs that involved physical mobility. By now, we have been involved in SAPs approximately 300 students (approximately 25 students per SAPs) and 90 staff (approximately 8 teaching and non-teaching staff per SAP).

In addition to the 2nd Opportunities Report Deliverables (this present document), WP6 has developed the D6.3. Standard Guidelines that allows the design and development of SAPs by all partners in a concerted manner and responding to the needs of implementing a SAP, which include the program at a glance of the SAP and the detailed program for (future) guidance and recognition of the SAPs by RUN-EU partners. As a result of the Standard Guidelines, for better communication and operation, "Step by Step" infographic was developed, so that the WP Coordinators can support the teachers in the construction of the SAP. This tool works as a checklist for teachers involved in SAP.

WP6 also developed a Digital Platform to support the SAPs management, implementation and dissemination, a portal with all the SAPs.

Assessment models were tested and we realize that the improvements in the implementation of SAPs are continuous, both in terms of verifying the best methodologies and pedagogical innovation, as well as the training alignment with the needs of the regions where the RUN-EU institutions are implemented.

Learning is an ever-present factor, each SAP we carry out is a learning moment in preparation and implementation. The challenges to overcome are still many and we are working on several fronts.

As mentioned before, the next steps include recognition and industry partnerships. These steps are complex topics due to the legal framework of the partners, but that is in our goals as a European University. In what concerns the contact with the industry partnerships, RUN-EU associated partners and regional industry we are working on since the first moment. In the medium term, WP6 will also rethink the possibility of having external learners in SAPs. When partnerships with the industry are established and implemented, we must start the process of including external learners for a market upskilling. Given the current conditions and framework, this is a RUN-EU aim to be implemented in the future.



Nevertheless, given the novelty of the format, it is clear that embedding the RUN-EU SAPs core distinctive characteristics will demand more time, continuing effort and more concrete examples.

The main challenges that should be considered at this stage are:

- 1. Achieving the degree of jointness recognition;
- 2. Achieving the aimed partnership with industrial partners;
- 3. Continuing to support the development and implementation of SAPs;
- 4. Facilitating the partner search and matching areas for cooperation;
- 5. Maintaining the initial enthusiasm from RUN-EU academic communities and securing the continuous and steady engagement of students and staff;
- 6. Dealing with many proposals and different development stages. Managing the Open Call workflow;
- 7. Implementing the SAPs Platform. Foreseen Integration with the European Student Card initiative I EduGain Federated Certification.
- 8. Finding framework for external learners.
- 9. Defining a good strategy to involve external learners.

SAPs are expected to be responsive to local industry and community, need to be able to answer to emerging trends and fill knowledge and skills gaps, becoming part of a lifelong learning broad strategy.

5. Annexes

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5.2. Survey on Potential RUN-EU SAPs

Check the template, <u>here</u>.

5.3 Overall SAPs Assessment

Annex 5.3.1.

Example Miro Board - Phase 1: SAP Circular Design with Plastics









Annex 5.3.2.

Individual Learning Reflection Report (ILRR)+Mobility Report Link to access, <u>here</u>.

Annex 5.3.3. Individual Learning Reflection Report: Proposals for improvement Link to access, <u>here</u>.

Annex 5.3.4.

Game Changing Games SAP – Findings from 'Individual Learning Reflection Reports'

Link to access, here.



Annex 5.3.5.

Circular Design with Plastics SAP – Findings from 'Individual Learning Reflection Reports'

Link to access, <u>here</u>.

Annex 5.3.6.

Example Miro Boards - Phase 2























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